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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,868	11/17/2003	Juan Arroyo	06132/075002	5599
21559	7590	03/19/2007	EXAMINER	
CLARK & ELBING LLP 101 FEDERAL STREET BOSTON, MA 02110			SALVOZA, M FRANCO G	
			ART UNIT	PAPER NUMBER
			1648	
SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE		
3 MONTHS	03/19/2007	PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/715,868	ARROYO ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	M. Franco Salvoza	1648

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 22 January 2007.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 4-13, 15, 19-22, 26-29, 33-37 and 41-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 4-13, 15, 19-22, 26-29, 33-37, 41-44 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application
- 6) Other: Notice to Comply

### **DETAILED ACTION**

Allowed claims 4-13, 15, 19-22, 26-29, 33-37, 41-44 have been withdrawn from issue.

Claims 4-13, 15, 19-22, 26-29, 33-37, 41-44 are pending and under consideration.

#### ***Specification***

The specification is objected to because of the following informalities: The specification and more specifically Table 1 on p. 12 must be amended so that the recited sequences recite and reflect the relevant SEQ ID NO:s.

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4-13, 15, 19-22, 26-29, 33-37, 41-44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 recites a nucleic acid molecule comprising sequences encoding the pre-membrane and envelope proteins of a West Nile virus and the capsid and non-structural proteins of a Yellow Fever virus, wherein said envelope protein comprises attenuating amino acid substitutions substitution is in position 316 and position 440, or the complement of said nucleic acid molecule.

It is not clear what position is intended as the claim does not refer to a reference

sequence, as indicated in the specification to be West Nile virus strain NY99-flamingo 382-99 (GenBank Accession Number AF196835).

This rejection can be overcome by amendment to the claim as well as the specification to specifically recite the reference sequence West Nile virus strain NY99-flamingo 382-99 (GenBank Accession Number AF196835).

Applicant is reminded that the sequence submission, amendment and direction of entry into the application must also meet the sequence listing requirements as listed in 37 C.F.R. 1.821-1.825.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Franco Salvoza whose telephone number is (571) 272-8410. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bruce Campell can be reached on (571) 272-0974. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



M. Franco Salvoza

Patent Examiner



BRUCE R. CAMPELL, PH.D  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1600

<b>Notice to Comply</b>	Application No. 10/715,868	Applicant(s) ARROYO ET AL.	
	Examiner Salvoza, M. Franco	Art Unit 1648	
<b>NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES</b>			
<p>Applicant must file the items indicated below within the time period set the Office action to which the Notice is attached to avoid abandonment under 35 U.S.C. § 133 (extensions of time may be obtained under the provisions of 37 CFR 1.136(a)).</p> <p>The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 C.F.R. 1.821 - 1.825 for the following reason(s):</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> 1. This application clearly fails to comply with the requirements of 37 C.F.R. 1.821-1.825. Applicant's attention is directed to the final rulemaking notice published at 55 FR 18230 (May 1, 1990), and 1114 OG 29 (May 15, 1990). If the effective filing date is on or after July 1, 1998, see the final rulemaking notice published at 63 FR 29620 (June 1, 1998) and 1211 OG 82 (June 23, 1998).</li> <li><input type="checkbox"/> 2. This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 C.F.R. 1.821(c).</li> <li><input type="checkbox"/> 3. A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 C.F.R. 1.821(e).</li> <li><input type="checkbox"/> 4. A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing."</li> <li><input type="checkbox"/> 5. The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A Substitute computer readable form must be submitted as required by 37 C.F.R. 1.825(d).</li> <li><input type="checkbox"/> 6. The paper copy of the "Sequence Listing" is not the same as the computer readable from of the "Sequence Listing" as required by 37 C.F.R. 1.821(e). The correct SEQ ID NO:2 is present in the paper copy of the sequence listing only. Therefore a search of the correct sequence is not possible.</li> <li><input checked="" type="checkbox"/> 7. Other: <i>The specification, claims, and sequence listing must be amended to include the reference sequence from Genbank listed on p. 3.</i></li> </ul> <p><b>Applicant Must Provide:</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> An initial or substitute computer readable form (CRF) copy of the "Sequence Listing".</li> <li><input checked="" type="checkbox"/> An initial or substitute paper copy of the "Sequence Listing", <b>as well as an amendment specifically directing its entry into the application.</b></li> <li><input checked="" type="checkbox"/> A statement that the content of the paper and computer readable copies are the same and, where applicable, include no new matter, as required by 37 C.F.R. 1.821(e) or 1.821(f) or 1.821(g) or 1.825(b) or 1.825(d).</li> </ul> <p>For questions regarding compliance to these requirements, please contact:</p> <p>For Rules Interpretation, call (703) 308-4216 or (703) 308-2923    For CRF Submission Help, call (703) 308-4212 or 308-2923    PatentIn Software Program Support        Technical Assistance.....703-287-0200        To Purchase PatentIn Software.....703-306-2600</p> <p><b>PLEASE RETURN A COPY OF THIS NOTICE WITH YOUR REPLY</b></p>			